1886.]

at the lower end. The hind tibiæ are clothed with very long dark brown appressed scales (not hairs). At their end a pair of spines, and also two singular follicular appendages resembling the husk of oats, acicular, scaly, hollow, dark-brown, membranous, loosely attached, and about two millimetres in length. On the middle of the tibia is a single somewhat longer spine with an accompanying follicle.

XIV.—On two new species of Ilex from the Eastern Himalaya.—By GEORGE KING, M. B., LL. D., F. L. S., Superintendent of the Royal Botanic Garden, Calcutta.

[Received May 8th ;-Read June 2nd, 1886.]

## (With Plates XIII. & XIV.)

Both the species described below fall into the section of the genus *Ilex* which is characterised by having the flowers in very dense short axillary branched cymes, and with the fruit never more than 4-celled.

ILEX SIKKIMENSIS, King. A glabrous evergreen diœcious tree 30 to 50 feet high, the young branches rather stout, their terminal buds covered by numerous large imbricated broadly-ovate blunt puberulous bracts, their bark pale yellowish; leaves thinly coriaceous, 5 to 7 inches long, narrowly elliptic-oblong or oblanceolate, the apex acute, the edges finely serrate, the midrib very prominent, primary lateral nerves 10 to 12 pairs, distinct but not prominent; flowers in shortly pedunculate glomeruli from the axils of the older leaves, bracts broadly acute, each bract with a 3-flowered, 2 to 3-bracteolate, cyme in its axil; flowers of both sexes pedicillate 4-merous, the sepals ovate blunt, the petals broadly ovate connected by their bases; stamens in the male flowers about as long as the petals, the anthers broadly ovate, in the female flower absent; ovary, absent in the male flowers, in the female 4-celled with 1 ovule from the inner upper corner of each cell; ripe fruit globose, 2 in. in diam., yellow, succulent, crowned by the remains of the quadrate stigma; pyrenes 4, trigonous, grooved, each 1-celled and 1-seeded.

Sikkim, at elevations of from 6,000 to 10,000 feet, collected by Kurz, Gamble, Lister, King.

This species falls into the section with I. insignis, dipyrena, and odorata. It is the plant referred to by Sir J. D. Hooker in the Flora of British India, Vol. I, p. 599, as a possible new species near odorata, of which, when working up the genus Ilex for that work, he had seen only a single imperfect specimen collected in Sikkim by Mr. Brandis.

[No. 3,

Although resembling *I. insignis*, Hook. fil. & Th., in many respects, this species is readily distinguished from that species by its longerstalked smaller fruit, and from *insignis*, as well as from every other Indian *Ilex*, by the great broad bracts which cover the terminal buds of its young branches. This has moreover yellow fruit, while the fruit of *insignis* and *dipyrena* is red, and that of *odorata* is nearly black. Like *odorata* the fruit of this has 4 pyrenes.

Plate XIII. 1, Apex of branch of *Ilex Sikkimensis*, King; 2, cluster of ripe fruits; 3, bract of inflorescence, of natural size; 4, apex of ripe fruit; 5, base of the same, *slightly enlarged*; 6, male flower; 7, the same with the stamens removed; 8, the same dissected to shew the calyx; 9, stamens; *enlarged*.

ILEX HOOKEEI, King. A small deciduous glabrous tree, the young branches rather thin, their bark pale yellow; leaves coriaceous, from 3 to 5 inches long, narrowly oblong or lanceolate, the apex acuminate, the edges serrate and slightly recurved when dry, midrib prominent, lateral primary veins 6 to 10 pairs, prominent, as also are the nerves; flowers in dense small sub-sessile axillary glomeruli which are covered when young by ovate-orbicular bracts; flowers pedicillate, the pedicels winged, 0.2 inch long, and with 2 or 3 lanceolate bracteoles near their bases; flowers unisexual or hermaphrodite, 4-merous, the sepals short, triangular, united by their bases, as also are the broadly-ovate petals; stamens short incurved, anthers broadly ovate; ovary surrounded at its base by a thin inconspicuous disc, fleshy, 4-celled, the stigma large thick discoid; ripe fruit globular, 0.2 inch across, crowned by the discoid stigma : pyrenes 4, obtusely trigonous.

On Tongloo in the Sikkim Himalaya, at elevations of from 9,000 to 10,000 feet; also in the Chumbi valley: Gamble, King, and Calcutta Botanical Garden native collectors.

This species also falls into the section with *insignis*, *dipyrena*, and *odorata*. It had not been collected when Sir J. D. Hooker worked up the genus for the Flora of British India. It is distinguished from all these by its smaller narrower leaves, but especially by the small glomeruli from each of which only 2 or 3 fruits are produced.

Plate XIV. 1, Branch of *Ilex Hookeri*, King; 2, ripe fruits; of natural size; 3, hermaphrodite flower seen from below; 4, 4, the same seen from above; 5, single petal and stamen; 6, stamens; enlarged.

266



Parker & Coward lith. West, Newman & Co. imp

